

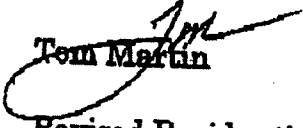


JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF CONSUMER & INDUSTRY SERVICES  
LANSING

DAVID C. HOLLISTER  
DIRECTOR

### Memorandum

**Date:** April 18, 2003  
**To:** Bob Swanson  
**From:**  Tom Martin  
**Subject:** Revised Residential Energy Code Requirements

I have attached the consensus recommendations of the Residential Energy Code Committee. All members of the committee agreed to these changes (See attached committee list). The proposed changes make significant changes in Michigan's energy code for residential buildings.

- For the first time the standard for windows in Michigan will measure the whole window rather than the center of glass.
- Also for the first time basement walls in all new homes constructed in Michigan will be required to be insulated.
- The current exemption for additions will be deleted.
- Ducts in unconditioned spaces (e.g. garage, attic) will be required to be insulated and sealed.

This is a consensus recommendation. I think it's fair to say that no one was entirely happy with everything in the proposal. The homebuilder representatives were very reluctant to support the basement insulation requirements. Guardian, Dow, and the consumer representative would have likely preferred to adopt the International Energy Conservation Code (IECC).

This proposal provides a significant increase in energy efficiency compared to Michigan's current requirements. We have run some rough numbers on the proposal and estimate that the proposed changes bridge 72% of the gap between Michigan's current requirements and the IECC in Lansing. In Marquette the proposed changes bridge 84% of the gap.

There are groups out there who will argue that the proposed energy efficiency improvements are not sufficient. They will argue that Michigan should be adopting a recognized national standard, just as we did with commercial buildings. Finally, they will argue that the political dynamic has changed and that there are not

sufficient votes in the Legislature to override a gubernatorial veto of a repeal of a strong energy code.

Although there are strong arguments for adopting the IECC, there are other factors to consider.

- If the consensus recommendations are promulgated as rules, Michigan can have substantially increased energy standards for new homes by the end of the year.
- Under the act, energy code changes must be proven to be cost effective. It is by no means clear that the requirements of the IECC would meet the statutory cost effectiveness test established by the Legislature. This provision was written into the law in 1995 when the Legislature repealed the adoption of the Model Energy Code in response to arguments from the homebuilders that the requirements were not cost effective.
- Even if we document that the requirements of the IECC are cost effective, the homebuilders are very likely to fight this issue in the courts as well as the Legislature. Litigation could conceivably hold up any energy efficiency improvements for years.
- Although MEC is correct that Illinois, the last state in the region without a statewide residential energy code, is considering adoption of the IECC, the bill was defeated by a 59-47 vote in the Illinois House on March 26. I have attached a study conducted last summer that compares residential energy codes in the Great Lakes region.
- MEC gives us credit in their position statement, a copy of which is attached, for adoption of a nationally recognized commercial energy code. What they probably don't realize is that the scope of the commercial energy code was expanded to include facilities previously covered by the MUEC. That means that residential dwellings more than 3 stories in height are covered by the commercial energy code. This increases energy savings in these buildings. Interestingly, although residential energy use in Michigan accounts for over 57 % of the energy used in buildings, commercial building energy use has been growing at a much faster rate. Between 1998 and 2000 total energy usage in commercial buildings increased at almost three times the rate in residential dwellings.
- The Administration is trying to work with the homebuilders on Governor Granholm's Land Use Leadership Council. A battle over the residential energy code may not be desirable at this time. Michigan's building codes are on a three-year cycle and the Administration will have an opportunity to revisit this issue.

## **Proposed Amendments to Michigan Uniform Energy Code**

### ***Windows***

- A) For glazing up to 15% of gross exterior wall area, the standard will be changed from center of glass R 1.9 to total unit R 1.85.
- B) For glazing from 15-25% of gross exterior wall area, the standard will be changed from center of glass R 2.5 to total unit R 2.5.
- C) For glazing above 25% of gross exterior wall area, the builder will have the option of either using windows that have at least a 3.3 R value (.30 U) or conducting a systems analysis.

### ***Basement Insulation***

Basement insulation will be required as follows:

- Region I—R5 Full Wall or R 10 Half Wall (top half)
- Region II—R 5 Full Wall or R 10 Half Wall (top half)
- Region III—R 10 Full Wall

### ***Duct Insulation/Sealing***

Ducts in unconditioned spaces will be required to be insulated and sealed as provided by standards contained in nationally recognized energy codes. This would set the standard for ducts in unheated spaces at R-5 and outside of a building at R-8. The provision would also coordinate this standard and the standards for pipe insulation with the Mechanical Code.

### ***Additions***

Additions would have to comply with the provisions of the MUEC.

### ***Home Energy Ratings***

Home energy ratings would be a helpful compliance tool. The code should contain language providing for the acceptance of home energy ratings for prescriptive and systems analysis approaches to compliance.

**2002 ENERGY CODE AD HOC COMMITTEE**  
**08-07-02*****DCIS – Office of Policy & Legislative Affairs (State of Michigan)***

**Name:** Tom Martin  
**Title:** Director  
**Address:** Post Office Box 30004, Williams Building -- 4<sup>th</sup> Floor  
Lansing, MI 48909  
**Telephone:** 517-373-7486  
**Fax:** 517-241-9822  
**Email:** [tmarti@michigan.gov](mailto:tmarti@michigan.gov)

***DCIS – Energy Office, Committee Energy Efficiency Representative***

**Name:** John Sarver  
**Title:** Supervisor  
**Company:** DSIC – Energy Office (State of Michigan)  
**Address:** Post Office Box 30221  
Lansing, MI 48909  
**Telephone:** 517-241-6280  
**Fax:** 517-241-6229  
**Email:** [jsaver@michigan.gov](mailto:jsaver@michigan.gov)

***Windows Representative***

**Name:** C. Givin Lincoln  
**Title:** Marketing Development Analyst  
**Company:** Guardian Industries  
**Address:** 14600 Romine Road  
Carleton, MI 48117  
**Telephone:** 734-654-4331  
**Fax:** 734-654-0935  
**Email:** [clincoln@guardian.com](mailto:clincoln@guardian.com)

***Insulation Representative***

<b>Name:</b> Tim Ballard	<b>also from Dow:</b> Gerald Williamson
<b>Title:</b> Account Manager	Technical Service Manager
<b>Company:</b> Dow Chemical Company	Dow Chemical Company
<b>Address:</b> 43422 West Oak Dr., #181 Novi, MI 48377	1605 Joseph Dr., 200 Larkin Center E162 Midland, MI 48674
<b>Telephone:</b> 248-446-0562	989-636-5504
<b>Fax:</b> 248-446-0838	989-638-9925
<b>Email:</b> <a href="mailto:thballard@dow.com">thballard@dow.com</a>	<a href="mailto:grwilliamson@dow.com">grwilliamson@dow.com</a>

**2002 ENERGY CODE AD HOC COMMITTEE*****Consumer Representative***

**Name:** Pat Hudson  
**Title:** Director  
**Company:** Urban Options  
**Address:** 405 Grove Street  
East Lansing, MI 48823  
**Telephone:** 517-337-0422  
**Fax:** 517-337-0437  
**Email:** [pat@urbanoptions.org](mailto:pat@urbanoptions.org)

***Local Building Official Representative***

**Name:** Joe Smith  
**Title:** Chief Building Official  
**Company:** Summit Township  
**Address:** 3075 Hendee Road  
Jackson, MI 49201  
**Telephone:** 517-812-6694  
**Fax:** 517-783-2552  
**Email:** [building@summittwp.com](mailto:building@summittwp.com)

***Architect Representative***

**Name:** Walt Koponen  
**Title:** President  
**Company:** Koponen Architects  
**Address:** 108 N. Center St.  
Suite 203  
Northville, MI 48167  
**Telephone:** 248-348-4141  
**Email:** [koponenarch@aol.com](mailto:koponenarch@aol.com)

***Homebuilder Representative (Single Family)***

**Name:** Dave Zilke  
**Title:** President  
**Company:** David Z & Company  
**Address:** 10726 Red Arrow Highway  
Bridgman, MI 49106  
**Telephone:** 616-465-5489  
**Fax:** 616-465-6938  
**Email:** [davidzbuilders@yahoo.com](mailto:davidzbuilders@yahoo.com)

***Multi-family Builder Representative***

**Name:** Duane Gunnink  
**Title:**  
**Company:** Gunnink & DeVries Builders  
**Address:** 102 54<sup>th</sup> St. NW  
Grand Rapids, MI 49548-5612  
**Telephone:** 616-530-3388; **Fax:** 616-530-4911

**2002 ENERGY CODE AD HOC COMMITTEE*****Remodeler Representative***

**Name:** Paul LaRoe  
**Title:** President  
**Company:** LaRoc Remodeling, Inc.  
**Address:** 1240 Jewett 1A  
Ann Arbor, MI 48104  
**Telephone:** 734-665-3055  
**Email:** [paullaroe@earthlink.net](mailto:paullaroe@earthlink.net)

***Utility Representative***

**Name:** Larry Kaufman  
**Title:** Program Manager  
**Company:** DTE Energy  
**Address:** 2000 2<sup>nd</sup> Avenue  
301 WCB  
Detroit, MI 48226  
**Telephone:** 313-235-8196  
**Fax:** 313-235-0615  
**Email:** [kaufmanl@dteenergy.com](mailto:kaufmanl@dteenergy.com)

***Academic Representative***

**Name:** Dr. Tim Mrozowski  
**Title:** Professor  
**Company:** Michigan State University  
Construction Management Program  
**Address:** Room 230, Farrall Hall  
East Lansing, MI 48824  
**Telephone:** (517) 353-0781  
**E-mail:** [mrozowsk@msu.edu](mailto:mrozowsk@msu.edu)